

An image forming device according to another aspect of the present invention, which is a graphic image generating device for generating a sequence (string) of parallax images comprising a plurality of computer graphics data containing parallax information, is provided with a controller for enabling virtually to shoot images of an object by moving a viewing point of a virtual imaging device and generate a parallax image string, on the basis of a time spatial parameter 5 indicative of time and/or spatial parameter information which is necessary at the time of generating its images, 10 which parameter being read in from the outside.

A method of forming images according to another aspect of the present invention, forming a sequence (string) of parallax images comprising a plurality of computer graphics data containing parallax information, is comprised of the steps of shooting images of an object by moving a viewing point of a virtual imaging device, and forming a parallax image string on the basis of time 15 spatial parameters indicative of time and/or spatial information necessary at the time of forming its images, 20 which parameters being read in from the outside.

An image forming device according to still another aspect of the invention, which is an image forming device for forming another string of parallax images by 25 performing a synthesizing processing for a string of parallax images comprising a plurality of image data containing parallax information, is provided with a controller for enabling to process, as an object of 30 synthesis, a plurality of different parallax image strings having a corresponding (matching) time spatial

parameter indicative of time and/or spatial information in their parallax image strings, and outputting another string of different parallax images generated by the synthesizing processing, together with this time spatial 5 parameter.

A method of forming images according to still another aspect of the invention, which is a method of forming another string of parallax images by performing a synthesizing processing for a string of parallax images 10 comprising a plurality of image data containing parallax information, is comprised of the steps of processing, as an object of its synthesis, a plurality of different parallax image strings each having corresponding (matching) time spatial parameters indicative of time 15 and/or spatial information in their parallax image strings, and outputting the another string of different parallax images generated by the synthesizing processing together with their time spatial parameters associated therewith.

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#### **Brief Description of the Drawings**

The above and other objects, features and advantages of the present invention will become more apparent from the following description of the presently preferred 25 exemplary embodiment of the invention taken in conjunction with the accompanying drawings, in which:

FIG. 1 is a schematic block diagram indicating an overall arrangement of a holographic stereogram producing device according to an embodiment of the present 30 invention;

FIGS. 2A and 2B are diagrams indicating an optical

system in the holographic stereogram producing device, in which FIG. 2A is a front view of the optical system in the holographic stereogram producing device, while FIG. 2B is a plan view thereof;

5 FIG. 3 shows an example describing a manner how time spatial parameters are supplied to an image capture device for producing image data of an object as original image data for use in the holographic stereogram producing device;

10 FIG. 4 shows an example describing a manner how the image data of the captured image and the time spatial parameter associated therewith are output from the image capture device;

15 FIG. 5 is a diagram indicating a process of forming a string of parallax image data by an image data processing unit provided in the holographic stereogram producing device, in which images of an object are captured while moving the image capture device along a straight track in translation motion;

20 FIG. 6 is a diagram indicating a process of forming a string of parallax image data by the image data processing unit therein, in which images of the object are captured by a re-centering method;

25 FIGS. 7A and 7B are diagrams indicating a viewing point conversion processing executed by the image data processing unit, in which FIG. 7A indicates a state of a reproduced image of a holographic stereogram that is formed without executing the viewing point conversion processing, while FIG. 7B indicates a state of a  
30 reproduced image of a holographic stereogram that is formed by executing the viewing point conversion